

Gustavus Disposal & Recycling Center (DRC) Quarterly Staff Report
Paul Berry, DRC Manager/ Operator
Monday, February 14th, 2022

My last quarterly report was at the November 8th, 2021 General Meeting. My next quarterly report is scheduled for the May 9th General Meeting.

General Operations and Management

Labor

In December all the applications, of which there were four, for the DRC's 2022 Temporary Labor Pool (referred to as the Pool) were collected and the applicants were interviewed. The 2022 Pool consists of returning members: Paul Dzubay and Ian Barrier. Ida Peters also joined the Pool. Mike Atkins did apply and was briefly in the 2022 Pool but unfortunately for the City, Mike resigned from the Pool in late January. I am very pleased to have our current three members.

As the Council gets into budgeting for our next fiscal year, FY2023, I will again be advocating for the creation of the new, regular, DRC Operator position which I have been pushing for since 2019. I will incorporate the new position into my FY23 budget proposal. I hope the Council and concerned members of the community can look beyond the short-term costs and concerns about creating a new regular position and see the long-term savings that can come about by careful planning.

The Mound

Utilizing the mound has proven tricky this winter. When it rains the soils that layer and cap the mound become very muddy. Muddy soils require us to use steel tracks over the wheels of our older Bobcat loader. The tracks allow us to power through the mud but they also further disturb the soil. The snows from November and December required a lot of plowing and digging tarps out of the snow.

During December our operation started placing bales on the uppermost layer (so far) of the mound. This is a significant action that increases the height of the mound by about four feet once the bales are buried.

Landfill Development Plan

As mentioned in my November report, the City hired Vista GeoEnvironmental Services to produce the Landfill Development Plan for the City (this plan can also be called the DRC's closure plan). This planning document provides the DRC Operator, Council Members and members of the public with a description of the regulatory framework that guides the placement of waste at the DRC. The Plan also documents the potential disposal areas on the DRC property and provides a calculation of disposal capacity of the identified disposal areas. The Plan is also a reference in how to properly close or cap portions of the landfill mound that have reached capacity. The link to this plan is:

https://cms.gustavus-ak.gov/sites/default/files/fileattachments/disposal/_recycling_center/page/20091/2021-11-30_-_landfill_development_plan_assembled.pdf

On page five (5) of the plan the reader can see the landfill usage or generation rate, which was estimated at 250 cubic yards a year in 2015. On first glance we can see that there is no short-term disposal capacity issue at the DRC. Even at a disposal rate of 300 cubic yards a year the current mound would provide an additional eight years of capacity resulting in a finished height of 37.5 feet (above baseline, not ground height) or well below tree line.

In the next year I would like to produce a companion document for this plan to provide my opinion on what areas within the plan should be developed or not be developed as well as presenting the potential risks that are associated with unlined waste mounds.

Groundwater monitoring test results

As part of the City's waste disposal permit with ADEC, the DRC is required to sample the ground water from two of the four ground water monitoring wells on a three year schedule. This sampling was done by myself on November 5th, 2021 and the results are posted on the document linked below:

https://cms.gustavus-ak.gov/sites/default/files/fileattachments/disposal_recycling_center/page/20691/2021_11_05_gustavus_disposal_and_recycling_center_ae_27777.pdf

Day of sampling notes are posted on the link below:

https://cms.gustavus-ak.gov/sites/default/files/fileattachments/disposal_recycling_center/page/20691/2021_fall_gustavus_drc_gwm_depthnotes.pdf

There were no problematic levels of the eleven metals that were analyzed in the report. The next sampling event will be in April or May of this year.

Bobcat A770 and large baler repairs

On Tuesday, November 30th, our A770 Bobcat which is the newer, larger loader (which has slightly more than 1,000 hours), suffered a serious failure in its hydraulic system. The failure was diagnosed by Ian who determined that the problem was a failure of an oil seal in one of the two motor carrier units. These two units are deeply buried in the core of the A770 and they link the hydraulic system to propulsion system. The repair process took two months. The repair was difficult and Ian had to balance his time with operating the DRC – managing customers and processing trash and recyclables. The DRC is very fortunate to have someone skilled like Ian on staff who can diagnose and repair equipment such as the A770. Had this problem occurred without Ian, I would have had to load the A770 on a flatbed (very difficult when the equipment cannot be made to run) and have it shipped to Juneau as there are no diesel repair shops in Gustavus. Had this been the case the City would have spend significantly more on the repair and because of the winter ferry schedule, the DRC could have been without its primary loader for a longer period of time.

Landfill safety and composting training at the DRC

A reminder that this training, provided by Zender Environmental Health and Research Group which utilizes the DRC as an example facility, is on track to take place this May 9 – 12. Participants will be arriving on a Monday ferry, have classroom and on-site trainings on Tuesday and Wednesday with the departure of participants on a Thursday ferry. The training will cover several areas of the DRC's operation including food waste composting. Lisa Daugherty of Juneau Composts! has been invited to speak about her operation. And Jonathan Rubbo has been invited to speak about his work in setting up an in-vessel composting system in Yakutat.

The class size is limited to 14-18 people and will also be attended by a representative of ADEC's Solid Waste Program. As of now the class is full and a wait list has been set-up. In addition to composting, additional topics will include landfill safety, a thorough tour of the DRC's recycling setup and a tour of the Community Chest to demonstrate the incorporation of a thrift store into a communities recycling operation. I also hope to have the group tour the community garden to demonstrate how compost can be used to enhance food production and food security.

All costs associated with this training event are covered by the Zender Group.

Second biennial Household Hazardous Waste (HHW) collection event

Because sales tax revenue was above projections for the current fiscal year, there is enough funding available for the City to once again host a HHW collection event for the community.

Our last, and only so far, collection event was in May of 2018. We had a goal of providing these events every other year but the pandemic caused the scheduled 2020 HHW event to be canceled.

The event dates are scheduled to be Sunday May 15th for households and Monday May 16th for businesses. The event is free for households and businesses will have to pay on a per pound schedule for the service (same setup as 2018). I am currently working with Clean Harbors, whom we worked with in 2018, to set up the event.

[I am still working on the FY2021 Annual Report. I usually release it at this time.]

Community Chest

In November Vicki Bender stepped down as Crew Boss for the Chest. Annie Mackovjak has resumed that role and is now the person responsible for the day to day operation of the Chest. Annie is one of the original crew who started up the Chest with Dan Thorington in 1998. She cares a lot about the operation of the Chest and we are all very lucky to have her as the current Crew Boss. The operation of the Chest has scaled back this winter to being open just one day a week and for shorter hours but there continues to be enough volunteer support to process all the donations that are only supposed to come in while the facility is open.

This winter the volunteer staff has been buffeted by the occasional person refusing to wear a mask within the main building. This is a difficult issue for the Chest's volunteer staff and for myself because masking is controversial and individuals can take hard stands on one side or the other on the issue. The bottom line is that it makes it less fun to be a volunteer at the Chest and with less volunteers we all loose. The current City policy for enclosed City buildings is clear though - when you are in the main building your nose and mouth need to be covered with a mask. The Chest is a small, poorly ventilated building and in the winter it can become a place for the spreading of not only Covid but also cold and flu viruses. The City has installed an air cleaner in the Chest's main building to help address the issue of poor air quality.

Capital Project Summaries

New Composting Facility/ Quonset replacement

Project description:

As described in previous reports, the objective of this project is to replace the failing Quonset structure with a more robust composting facility capable of processing greater amounts of material in a more temperature controlled manner than our current facility is able to. This project also seeks to pave more of the composting yard with concrete and install concrete push walls behind the piles of stored wood chips, sawdust, overs and curing compost.

Project status:

Unfortunately this project is several years behind schedule. For my most recent effort I have created some basic drawings of a simple, five bay facility constructed of large, movable concrete Eco-blocks. The facility would sit on a concrete slab with a concrete apron. Still to be determined is what would be used to cover the facility.

Soon I will start working with an engineering firm to figure out the most cost-effective way to fulfill the facilities needs. I am hoping to get this document out during this fiscal year so that the facility can be constructed in the coming summer or fall.

Household Hazardous Waste (HHW) Facility

Project description:

This project has involved the specification and purchase of a 20' long x 8' wide & 8' high welded steel container designed for storing equipment fuel, used lead-acid and dry-cell batteries and other miscellaneous hazardous materials. The unit includes spill containment, fire suppression, ventilation, lighting, shelving, and signage.

Project Status:

The new unit was set in place at the DRC on November 15th by Toshua Parker & Zach Lenning. Each of them was operating a telescopic forklift to move and set the unit in place. The 16,000 pound unit is sitting on a base consisting of four treated 4" x 10" timbers. Tasks still remaining before the HHW facility will go into full use is the connection of 120 VAC electricity for the lights and fire alarm and the connection of a CO2 cartridge in the fire suppression system. The latter will be performed when Southeast Extinguisher makes their next scheduled visit to Gustavus in April or May.

New main building

Project description:

As mentioned in the previous report this new building will be designed to initially work beside and then eventually replace the current landfill building. The current landfill building has two critical shortcomings:

- 1 It is too small to be able to properly accommodate the amount of waste throughput on a daily or weekly basis. It is too small to house the proper equipment needed to process effectively the community's waste stream.
- 2 It was not constructed to allow the full use of powered equipment, such as a small loader or forklift, within the building. Evidence for this is a lack of concrete push walls or metal clad barrier posts beside drive through openings.

Project Status:

To recap, the design process for the new building started with the adoption of the Capital Improvement Plan COG_CIP 2021-2025 document in the spring of 2021, and the adoption of the new buildings scoping document in February of 2020. This past October the Council awarded funding for the design phase of the project.

During November I drafted a Request For Proposal (RFP) document for the design, engineering and estimation of construction costs for the new building project. This document was sent to four different engineering firms. Two of the four firms expressed interest in the project but ultimately no proposals were received for the project by the close of the application period on December 16th.

In an effort to keep the project moving forward I contacted the two firms who had expressed interest in the project. Both parties remarked that this is a good project but there was concern with the scoring criteria I had chosen and both firms noted the discrepancy in cost between my list of objectives in the RFP and the project budget in the February 2020 scoping document. For a transfer station like building sized between 5,000 – 6,000 square feet the cost would be closer to \$150 per square foot putting the basic price tag at \$750K - \$900K whereas our scoping document came in at \$287K.

I have determined that the best way forward in the design of the new building is to break the project down to two separate tasks:

1. Pre-development or schematic design work – coming up with the basic size, interior layout, location and size of any doors/ openings, where any concrete push-walls are located. The exact location for the new building and its associated access driveway. With this information the size and composition of the building can be determined. With this information a cost range for the building and determination of exactly what

permitting is required. All of this information will be used to revise the buildings scoping document. The revised scoping document will be submitted to the Council for their review and hopeful adoption; and

2. Construction ready drawings and project execution - Once the Council agrees to the new building's revised scoping document, the generation of construction documents and the determining how the project will be managed: will the project be managed in-house (less likely) or will the City hire a project manager to draft and administer the bidding process (a more likely scenario).

Funding. There are grants and low-interest loans available for municipal projects such as the new building project. One of the roles an engineering and architectural firm can perform is to help locate funding for a project. Because of the cost of this project, the City will need to seek funding outside of City reserves. Like all public works projects the new building will be expensive project. But the new landfill building is also a very important facility for the community and has to be constructed within the standards set for public buildings.

The end, thank you.

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